

APPENDIX G **RECREATION OPPORTUNITY SPECTRUM (ROS) CLASSES** **AND LIMITS OF ACCEPTABLE CHANGE**

Table G.1: Recreation Opportunity Spectrum Definitions

	Primitive	Semi-primitive Non-motorized	Semi-primitive Motorized	Roaded Natural	Rural
Experience Opportunity	Isolation from sights and sounds of humans. High degree challenge and risk.	Isolation from sights and sounds of humans. Independence. Moderate to high degree of challenge and risk.	Moderate isolation from sights and sounds of humans. Independence, self-reliance. Moderate degree of challenge and risk.	About equal opportunity to experience social contact or to experience isolation. Opportunity to test and practice outdoor skills in area of moderate risk and challenge.	High probability for social interaction. Outdoor skills generally not needed.
Setting	Large area of unmodified natural environment. Few human induced restrictions.	Moderate to large sized natural or naturally appearing area. Minimum of restrictions.	Predominately natural appearing moderate to large size area. Motorized use permitted.	Predominately natural appearing environment. Resource modifications harmonize with environment.	Predominately modified environment. Resource modifications obvious.
Remoteness	Usually 3 miles from transportation corridor with motorized use.	½ mile from roads, trails, etc., with motorized use.	½ mile from gravel or single-lane paved roads.	½ mile from double-lane paved roads and railroads.	None
Evidence of Humans	Evidence of humans unnoticed by traveler. Structures very rare.	Modifications don't draw attention. Structures rare.	Modifications don't draw attention of motorized visitor. Other roads and trails obvious. Structures rare.	Modifications easily noticed. Other roads, trails, obvious. Structures scattered.	Modifications often dominate. Strong evidence of roads, parking lots. Structures readily apparent/
Social Setting	Less than 6 parties per day encountered on trails. Less than 3 parties visible from campsite.	6-15 parties per day encountered on trails. 6 or less parties visible at campsite.	15-30 parties per day contacted on trails. 10 or less parties at campsites.	30 + parties per day contacted on trails. More than 10 parties visible from campsites.	Frequent to continuous contact with other parties.

	Primitive	Semi-primitive Non-motorized	Semi-primitive Motorized	Roaded Natural	Rural
Managerial Setting	Controls primarily offsite.	On-site controls and regimentation subtle.	On-site controls and regimentation subtle.	On-site controls and regimentation obvious.	Regimentation and controls obvious and numerous.
Trail Standard					
Grade					
Sustained	20%	20%	15%	15%	12%
Maximum Pitch	no limit	30%	25%	20%	15%
Clearing					
Height	8'	8'	8'	8'	8'
Width	36"	36"-48"	36"-48"	36"-48"	48"+
Tread Width	12"	12"-18"	18"	18"	18"-24"+
Surface	Natural, many rocks, downed logs.	Natural, spot gravel. Some rocks, downed logs.	Mostly natural. Sections of gravel surface. Roots, imbedded rocks in place.	Gravel, chips, surfacing, when necessary.	Gravel, chips, or paved.
Setting Characterization	Area is characterized by essentially unmodified natural environment of fairly large size. Interaction between users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. Motorized use within the area is not permitted.	Area is characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is not permitted.	Area is characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is permitted.	Area is characterized by predominantly natural-appearing environments with moderate evidences of the sights and sounds of man. Such evidences usually harmonize with the natural environment. Interaction between users may be low to moderate, but with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and	Area is characterized by substantially modified natural environment. Resource modification and utilization practices are to enhance specific recreation activities and to maintain vegetative cover and soil. Sights and sounds of humans are readily evident, and the interaction between users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for special activities. Moderate densities are provided far away from developed sites. Facilities for intensified motorized use and parking are available.

	Primitive	Semi-primitive Non-motorized	Semi- primitive Motorized	Roaded Natural	Rural
				design of facilities.	
Experience Characterization	Extremely high probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman and outdoor skills in an environment that offers a high degree of challenge and risk.	High, but not extremely high, probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman and outdoor skills in an environment that offers challenge and risk.	Moderate probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman and outdoor skills in an environment that offers challenge and risk. Opportunity to have a high degree of interaction with the natural environment. Opportunity to use motorized equipment while in the area.	About equal probability to experience affiliation with other user groups and for isolation from sights and sound of humans. Opportunity to have a high degree of interaction with the natural environment. Challenge and risk opportunities associated with more primitive type of recreation are not very important. Practice and testing of outdoor skills might be important. Opportunities for both motorized and non-motorized forms of recreation are possible.	Probability for experiencing affiliation with individuals and groups is prevalent, as is the convenience of sites and opportunities. These factors are generally more important than the setting of physical environment. Opportunities for wild-land challenges, risk taking, and testing of outdoor skills are generally unimportant except for specific activities like downhill skiing, for which challenge and risk-taking are important elements.

	Primitive	Semi-primitive Non-motorized	Semi- primitive Motorized	Roaded Natural	Rural
Land Based Activity Characterization	Viewing Scenery Hiking and Walking Horseback Riding Tent Camping Hunting Nature Study Mountain Climbing	Viewing Scenery Automobile (off- road use) Motorcycle and Scooter Use Specialized Land craft Use Aircraft Use Hiking and Walking Horseback Riding Camping Hunting Nature Study Mountain Climbing	Viewing Scenery Viewing Activities Viewing Works of Human-Kind Automobile (includes off-road use) Motorcycle and Scooter Use Specialized Land craft Use Train and Bus Touring Aircraft Use Aerial Trams and Lifts Use Hiking and Walking Bicycling Horseback Riding Camping Picnicking Resort and Commercial Services Use Resort Loading Recreation Cabin Use Hunting Nature Studies Mountain Climbing Gathering Forest Products Interpretive Services		Viewing Scenery Viewing Activities Viewing Works of Human-Kind Automobile (includes off-road use) Motorcycle and Scooter Use Train and Bus Touring Aircraft Use Aerial Trams and Lifts Use Hiking and Walking Bicycling Horseback Riding Camping Picnicking Resort and Commercial Services Use Resort Lodging Recreation cabin Use Hunting Nature Studies Gathering Forest Products Interpretive Services Team Sports Participation Individual Sports Participation Games and Play Participation

	Primitive	Semi-primitive Non-motorized	Semi- primitive Motorized	Roaded Natural	Rural
Water Based Activity Characterization	Canoeing Other Watercraft (non-motorized use) Swimming Fishing	Boating (powered) Canoeing Sailing Other Boating Swimming Diving (skin or scuba) Fishing	Tour Boat and Ferry Use Boat (Powered) Canoeing Sailing Other Watercraft Use Swimming and Waterplay Diving (skin and scuba) Waterskiing and WaterSports Fishing		Tour Boat and Ferry Use Boat (Powered) Canoeing Sailing Other Watercraft Use Swimming and Waterplay Diving (skin and scuba) Waterskiing and Watersports Fishing
Snow and Ice Based Activity Characterization	Snow play X-Country Skiing/Snowshoeing	Ice and Snow Craft Use Skiing, Downhill Snow play X-Country Skiing/Snowshoeing	Ice and Snow Craft Use Ice Skating Sledding and Tobogganing Downhill Skiing Snow play X-Country Skiing/Snowshoeing		Ice and Snow Craft Use Ice Skating Sledding and Tobogganing Downhill Skiing Snow play X-Country Skiing/Snowshoeing

These activities (from R1 M FSH 2309.11) are illustrative only.

LIMITS OF ACCEPTABLE CHANGE (LAC)

LAC (Limits of Acceptable Change) Planning System provides managers with clear objectives for management that will assure the integrity of the Wilderness resource. It is a management framework portraying the desired future condition for the Selway Bitterroot Wilderness (SBW), and a means for gauging and accomplishing those objectives.

The goal of this management direction is to preserve the integrity of the SBW resource to meet the purposes described in the Wilderness Act; to protect and preserve natural conditions so that the wilderness 1) generally appears to have been affected primarily by the forces of nature, with the imprint of human work substantially unnoticeable, and 2) has outstanding opportunities for solitude or primitive and unconfined recreation.

The desired future condition for the SBW is to prevent significant deterioration by preventing or correct impacts that could have an adverse cumulative effect. The “minimum tool principle” will be applied to the management of all resources within the SBW. Minimum management actions will be implemented that accomplish the objective with the least impact on the physical, biological, and social characteristics of Wilderness.

Area within the SBW is classified into four opportunity classes or zones. By allocating different opportunity classes, overall degradation of the wilderness resource can be prevented, while simultaneously establishing realistic objectives for those areas that receive more use and impacts. Each area is managed to meet the limit of acceptable change prescribed for its designated opportunity class. The opportunity class descriptions provide a managerial framework for managing toward desired future conditions by outlining the following desired resource, social and managerial settings.

SELWAY-BITTERROOT WILDERNESS

Table G. 2: Summary of Resource and Social Setting Components for Each Opportunity Class

	Opportunity Class			
	1	2	3	4
RESOURCE SETTING: General Description	Unmodified natural environment	Unmodified natural environment	Unmodified natural environment	Predominantly unmodified natural environment
1. Ecological conditions	Not measurably affected by the action of users.	Some sites slightly affected by the action of users.	Some sites moderately affected by the action of users.	Many sites substantially affected by the action of users.
2. Prevalence and duration of impact.	Not measurably affected by the action of users.	Some sites slightly affected by action of users.	Some sites moderately affected by the action of users.	Many sites substantially affected by the action of users.
3. Visibility	Noticeable to a few visitors	Apparent to a moderate number of visitors.	Apparent to moderate number of visitors.	Impacts are readily apparent to most visitors.
SOCIAL SETTING: General Description	Outstanding opportunity for isolation and solitude.	High opportunity for isolation and solitude.	High opportunity for isolation and solitude.	Moderate to low opportunities for isolation & solitude.
1. General level of encounters	Extremely rare	Very infrequent	Low	Moderate - high
2. Degree of challenge	Very high	High	Moderate	Moderate - low
3. Interparty contacts while traveling	Extremely rare	Very few	Low	Relatively high
4. Interparty contacts at the campsite	Non-existent	Very low	Low	Moderately frequent

Table G.3: Summary of Managerial Setting Components for Each Opportunity Class

	Opportunity Class			
	1	2	3	4
MANAGERIAL SETTING: General Description	Management strongly emphasizes sustaining the natural ecosystem.			
1. Contact with management personnel during normal use season	Occurs by invitation, or to correct apparent potential problems. Discussion items limited to meeting visitor information requests, distributing use, and achieving compliance with rules and regulations.			
2. Rules and regulations and visitor behavior	Will be communicated to visitors primarily outside of the wilderness areas such as at trailheads and boundary portals. When necessary, on-site enforcement and communication of rules and regulations will be conducted.			
3. Formal and informal user education programs	Will be initiated outside wilderness to inform users about what to expect and how to employ minimum impact skills.			
4. Formal rules and regulations	May be necessary to achieve management objectives. Permits may be considered only when light-handed, less restrictive measures have consistently failed to achieve desired goals and objectives.			
5. Presence and extent of signing	No signs will be permitted, except for rare instances involving federal liability or resource damage.	Minimum necessary to meet federal liability, policy, or provide for resource protection.	Trail signs permitted. Other signs may be present for resource protection or federal liability only, and will provide only minimal information.	Signs will be placed to aid in distributing and dispersing use, for resource protection, and for fed
6. General level of trail management	No system trails. Existing trails will not be maintained.	Manage system trails to appropriate standard to accommodate light use.	Manage system trails to appropriate standard to accommodate light to moderate levels of use.	Manage system trails to appropriate standard to accommodate heavy traffic
7. Presence of administrative structures (This does not include trail structures.)	No new structures permitted. Historically significant structures and lookouts acceptable.		Allowed as described in the section Administrative Activities and Facilities	
8. Presence of permanent structures (corrals, hitch racks, etc.)	None allowed, temporary structures	None allowed, temporary structures only	None allowed, temporary structures only.	Permitted as necessary for resource protection. Native materials only.
9. Presence of temporary structures	Allowed only as last resort. To be completely dismantled and removed when not in use, or if the resource problem is corrected.	Allowed for resource protection. Removed when not in use, or if the resource problem is corrected.		Removed when not in use.

The indicators and standards are displayed in the table below.

Table G.4: Standards For Site And Social Indicators

	Opportunity Class			
	1	2	3	4
1. Maximum # of sites at a particular impact rating per square mile. ¹	0 - 1 light 0 moderate 0 heavy or extreme	1 light 1 moderate 0 heavy or extreme	2 light 1 moderate 0 heavy or extreme	1 light 2 moderate 1 heavy or extreme ²
2. Maximum # of sites per square mile. ³	1	2	3	4
3. Maximum # of other parties encountered each day.	80 % Change of Meeting No More Than ⁴			
	0 Parties	0 Parties	2 Parties	5 Parties
4. Maximum # of other parties camped within sight or sound.	80 % Change of Seeing or Hearing No More Than			
	0 Parties	0 Parties	1 Party	2 Parties

¹ A "site" will include any area of human impact, including discontinuous areas where use is likely to be by the same group, such as stock holding areas, or separate tent pads. For purposes of determining sites per square mile, this also includes dams and administrative sites, but does not infer that either will be removed. Outfitter base camps within the Selway-Bitterroot Wilderness are not subject to the impact level standard, but will be counted towards "maximum number of sites per square mile". Base camps generally function as a hub of operations servicing outlying camps. Generally an outfitter would have only one base camp in the wilderness. In some instances, an outfitter may not have this type of operational camp within the wilderness. In rare instances an outfitter might have more than one base camp when needed to service separate groups of outlying camps. Base camp impacts will be managed separately through the outfitter's special use permit, and base camp standards will be identified when management direction for special uses is updated. Impacts are evaluated by using a standardized procedure that gauges the degree of various impact parameters including vegetation loss, soil disturbance, damage to trees, developments, cleanliness, etc.

² Any sites rated as "extreme" in Opportunity Class 4 will require an administrative review to identify actions necessary to prevent further deterioration, and to strive to lessen the impacts. Recommended actions will be analyzed to predict and minimize potential adverse effects on the adjacent area.

³ Sites per square mile (Indicators 1 and 2) will be determined using a "roving" square mile grid within the given opportunity class. This means that from any given site, the maximum number of sites that fit within a roving square mile area will be counted.

⁴ Encounters will be measured and analyzed during the "use season" which is the time period during which the area is reasonably snow free, allowing for the movement of people and stock. Though there is some winter use, this will not be counted as part of the use season. The use season will vary depending on conditions such as elevation.